AMENDMENTS TO THE CLAIMS

1 through 21 (Previously canceled)

22. (Amended) A reciprocating foot pedal exerciser for stepping, walking, jogging and running in place, enabling automatically variable length strides, comprising:

a pair of foot pedals for receiving user foot action at a substantially constant forward step-down position on the exerciser;

support means for guiding said foot pedals in primarily back and forth strokes variable rearwardly from said forward step-down position ~~in response to the user's foot action~~ and

means for returning said foot pedals to said forward step-down position at the end of each stride independently of stride length.

23. (Previously added) The exerciser of claim 22 wherein said means for returning returns the rearmost one of said foot pedals to said forward step down position using step-down energy.

24. (Previously added) The exerciser of claim 22 having arresting means, energy conversion means and energy storage means to recuperate energy of returning said foot pedals.

25. (Previously added) The exerciser according to claim 22 further including power and control means connecting the downward force and deflection of a forward one of said pedals to the rearward one of said pedals to propel said rearward pedal forward.

26. (Previously added) The exerciser in accordance with claim 22 wherein said means for returning includes fluid means.

27. (Previously added) The exerciser in accordance with claim 22 wherein said means for returning comprises spring means.

28. (Previously added) The exerciser according to claim 22 further including speed regulating means to control rearward motion of said foot pedals.

29. (Previously added) The exerciser according to claim 28 wherein said regulating means comprises spring and damper means.

30. (Previously added) The exerciser according to claim 28 wherein said regulating means comprises rotary resistance means.

31. (Previously added) The exerciser according to claim 22 further including motorized speed regulating means to control rearward motion of said foot pedals.

32. (Previously added) The exerciser according to claim 31 wherein said regulating means comprises frictional drive means interconnecting said motorized means and said foot pedals.

33. (Previously added) The exerciser according to claim 31 wherein said regulating means comprises fluid pumping means interconnecting said motorized means and said foot pedals.

34. (Previously added) The exerciser according to claim 31 further comprising:

sensor means to sense the user's foot force rearward or forward on said foot pedal and;

control means to receive a signal from said sensor means and to vary the speed of said motorized speed regulating means in response to said foot force.

35. (Previously added) The exerciser according to claim 22 further including foot pedal braking means to brake forward motion of said foot pedal when said user is standing on said foot pedal.

36. (Previously added) The exerciser according to claim 22 further including cushion means integral with said foot pedals or said support means to cushion the user's step-down on said foot pedal.

37. (Previously added) The exerciser according to claim 22 wherein said means for returning employs stride energy.

38. (Previously added) The exerciser of claim 22 wherein said means for returning employs energy sources external to a user.

39. (Previously added) The exerciser of claim 38 wherein said external energy sources include fluid power means.

40. (Previously added) The exerciser of claim 22 wherein said means for returning employs stored energy from a plurality of sources.

41. (Previously added) A reciprocating foot pedal exerciser for walking, jogging, running and stepping in place enabling automatically variable length strides, comprising:

foot pedals for receiving user foot action at a forward step-down position;

support means for guiding said foot pedals in primarily back and forth strokes variable rearwardly from said step-down position and

means returning said foot pedals to said forward step-down position at the end of each stride at velocities substantially greater than stride velocity.